

I claim:

1. A blower assembly for providing continuous positive airway pressure to a patient comprising

5 an inlet muffler box which receives a turbulent stream of air which is directed along an air pathway and is transformed into an approximately laminar stream of air; a blower box comprising a centrifugal fan; and an outlet muffler box connected to a hose leading to the patient.

10 2. The blower assembly of claim 1 wherein the interior surfaces are coated with an anechoic material.

3. The blower assembly of claim 1 wherein the air pathway is reduced in cross sectional area from that of the hose leading to the patient.

15 4. The blower assembly of claim 3 wherein the cross sectional area of the air pathway is 20% to 50% smaller than that of the hose leading to the patient.

20 5. The blower assembly of claim 3 wherein the cross sectional area of the air pathway is 25% to 35% smaller than that of the hose leading to the patient.

25 6. The inlet muffler box of claim 1 which comprises a first perforated tube having a sealed end distal to an inlet orifice which receives a turbulent stream of air through the orifice; a first divider placed along the length of the first perforated tube; a second divider placed on the opposite wall from the inlet orifice; a second perforated tube having a sealed end distal to an orifice; and a third divider along the length of the second perforated tube, and an orifice opening to the blower box.

7. The inlet muffler box of claim 6 wherein the perforated tubes are of approximately equal length and each of the dividers is about 60% of the length of the perforated tubes.

5 8. A blower assembly for providing continuous positive airway pressure to a patient comprising

an inlet muffler box which receives a turbulent stream of air which is directed into a first perforated tube with a sealed end, whereby the air enters the muffler box through the perforations in the first tube, is directed along an air pathway by a first divider placed along the tube, is diverted by a second divider placed on the wall of the
10 box opposite to the first perforated tube, is further diverted by a third divider placed along a second perforated tube with a sealed end, whereby transforming the turbulent stream of air into a laminar flowing stream of air which then passes through the perforations in the second tube into a blower box; and

15 a blower box comprising a centrifugal fan; and

an outlet muffler box connected to a hose leading to the patient.

9. The blower assembly of claim 1 or 8 wherein the outlet muffler box comprises the inlet muffler box of claim 6.